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EXAMINER

RIGGLEMAN, JASON PAUL

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/578,386  
Filing Date: May 03, 2006  
Appellant(s): JERG ET AL.

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Andre Pallapies  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 3/31/2011 appealing from the Office action mailed 11/10/2010.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The following is a list of claims that are rejected and pending in the application:

Claims 11-23.

**(4) Status of Amendments After Final**

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

**(5) Summary of Claimed Subject Matter**

The examiner has no comment on the summary of claimed subject matter contained in the brief.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

**(7) Claims Appendix**

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

**(8) Evidence Relied Upon**

FR2285838*	Lutolf	09-1975
CH571852**	Bolla	1-1976
GB949954	Steen	2-1964
GB2003840A	Deuser et al.	03-1979
6003529	Perry, Jr.	12-1999
2654894	Van Dijk	10-1953

\* English language equivalent AU1297584789 is attached.

\*\* English human translation is attached.

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

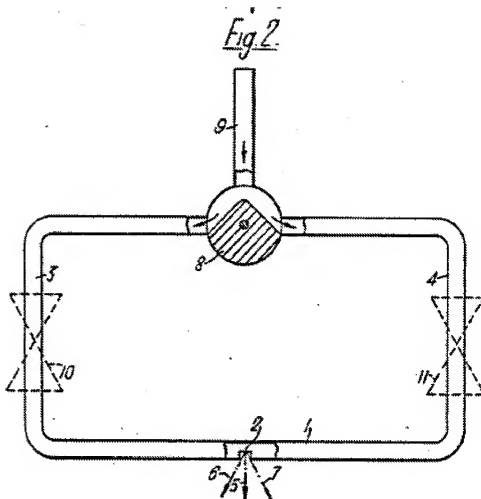
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11, 14, 18-19, and 21 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Lutolf (FR2285838) in view of Van Dijk (US Patent No. 2654894) in view of Steen (GB Patent Publication No. GB949954).

Lutolf teaches a dishwasher having a spray device including spray channel (3) and distributors, valves (80) (60), feeding the spray channel (3) which cooperate to *regulate* a quantity of rinsing liquid supplied to the spray channel (3) and a pressure of the rinsing liquid in parts of the spray channel. The spray channel has two open ends (each open end connects to the open valve) which rinsing liquid can be supplied in pressurized manner, see Figure. The pressure is variable -- by means of the valves (80) (60). The rinsing container (1) is trough-shaped. The valves have one opening (*inherent*) in which liquid can be supplied in a pressurized manner via an open end of the spray channel in a predetermined position of the distributor. The openings (see spray patterns) are necessarily configured over a predetermined arc segment.

In the alternative, Lutolf does not teach that the check valves (60)(80) cooperate to *regulate* the flow of liquid to the spray channels; however, Van Dijk teaches a cleaning device in which a conduit (20) is supplied at each end by a distributor (valves 48 & 53), Fig. 1. Van Dijk teaches that "the degree of turbulence of the liquid may be increased by opening both valves 48 and 53, or they (either of them) may be rhythmatically opened and closed to provide surges of liquid" (Column 4, Lines 59-64). Further, Steen teaches feeding liquid under pressure, towards one another, two columns of liquid which collide to create a lateral spray at the point of collision to create pulsating pressure actions of different phase (Lines 24-39).



The pulsing permits fine control of the angle of spread of the spray (Lines 45-50), see Fig. 2, inserted into text, above. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lutolf with the teachings of Van Dijck and Steen to create a washing machine in which there is fine control of the pulsing of the spray -- which is especially useful in a system with a stationary spray system -- to effectively wash the dishes and achieve the expected result.

Claims 12-13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lutolf (FR2285838) in view of Van Dijck (US Patent No. 2654894) in view of Steen (GB Patent Publication No. GB949954) and further in view of Bolla (CH571852).

Lutolf teaches a dishwasher having a spray device including spray channel (3) and distributors, valves (80) (60), feeding the spray channel (3) which cooperate to *regulate* a quantity of rinsing liquid supplied to the spray channel (3) and a pressure of the rinsing liquid in parts of the spray channel. The spray channel has two open ends (each open end connects to the open valve) which rinsing liquid can be supplied in pressurized manner, see Figure. The pressure is variable -- by means of the valves (80) (60). The rinsing container (1) is trough-shaped. The valves have one opening (*inherent*) in which liquid can be supplied in a pressurized manner via an open end of the spray channel in a predetermined position of the distributor. The openings (see spray patterns) are necessarily configured over a predetermined arc segment. In the alternative, Lutolf does not teach that the check valves (60)(80) cooperate to *regulate* the flow of liquid to the spray channels; however, Van Dijck teaches a cleaning device in which a conduit (20) is supplied at each end by a distributor (valves 48 & 53), Fig. 1. Van Dijck teaches that "the degree of turbulence of the liquid may be increased by opening both valves 48 and 53, or they (either of them) may be rhythmatically opened and closed to provide surges of liquid" (Column 4, Lines 59-64). Further, Steen teaches feeding liquid under pressure, towards one another, two columns of liquid which collide to create a lateral spray at the point of collision to create pulsating pressure actions of different phase (Lines 24-39). The pulsing permits fine control of the angle of spread of the spray (Lines 45-50), see Fig. 2. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify

Lutolf with the teachings of Van Dijck and Steen to create a washing machine in which there is fine control of the pulsing of the spray -- which is especially useful in a system with a stationary spray system -- to effectively wash the dishes and achieve the expected result.

Lutolf as modified by Van Dijck, as modified by Steen does not teach the periodic movement of the distributor; however, Bolla teaches a distributor (8) which is movable relative to a spray channel in a movement, Figs. 1-2. There is a drive means for driving the distributor in periodic movement. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lutolf, as modified by Van Dijck, as modified by Steen, with Bolla to create a dishwashing machine with an automated-alternating spray pattern with fine control to achieve the expected result.

Claims 12-13, 16, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lutolf (FR2285838) in view of Van Dijck (US Patent No. 2654894) in view of Steen (GB Patent Publication No. GB949954) and further in view of Perry (US Patent No. 6003529) and Deuser et al. (UK Patent Application Publication No. 2003840).

Lutolf teaches a dishwasher having a spray device including spray channel (3) and distributors, valves (80) (60), feeding the spray channel (3) which cooperate to *regulate* a quantity of rinsing liquid supplied to the spray channel (3) and a pressure of the rinsing liquid in parts of the spray channel. The spray channel has two open ends (each open end connects to the open valve) which rinsing liquid can be supplied in pressurized manner, see Figure. The pressure is variable -- by means of the valves (80) (60). The rinsing container (1) is trough-shaped. The valves have one opening (*inherent*) in which liquid can be supplied in a pressurized



manner via an open end of the spray channel in a predetermined position of the distributor. The openings (see spray patterns) are necessarily configured over a predetermined arc segment.

In the alternative, Lutolf does not teach that the check valves (60)(80) cooperate to *regulate* the flow of liquid to the spray channels; however, Van Dijk teaches a cleaning device in which a conduit (20) is supplied at each end by a distributor (valves 48 & 53), Fig. 1. Van Dijk teaches that "the degree of turbulence of the liquid may be increased by opening both valves 48 and 53, or they (either of them) may be rhythmatically opened and closed to provide surges of liquid" (Column 4, Lines 59-64). Further, Steen teaches feeding liquid under pressure, towards one another, two columns of liquid which collide to create a lateral spray at the point of collision to create pulsating pressure actions of different phase (Lines 24-39).

The pulsing permits fine control of the angle of spread of the spray (Lines 45-50), see Fig. 2. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lutolf with the teachings of Van Dijk and Steen to create a washing machine in which there is fine control of the pulsing of the spray -- which is especially useful in a system with a stationary spray system -- to effectively wash the dishes and achieve the expected result. Lutolf as modified by Van Dijk as modified by Steen does not teach the to-and-fro movement of the distributor in alternating directions and the drive means ; however, Perry teaches a plate-type distributor (valve 40) which is movable related to the spray channel in a displacement movement in alternating directions, Fig. 2. There is a drive means for driving the distributor in periodic movement. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lutolf as modified by Van Dijk as modified by Steen with Perry to create a dishwashing machine with an alternating spray pattern to achieve the expected result.

Deuser et al. illustrates the pervasive use and motivation for alternating spray patterns – in particular for washing 3-D objects such as containers.

Claims 17 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lutolf (FR2285838) in view of Van Dijck (US Patent No. 2654894) in view of Steen (GB Patent Publication No. GB949954) and further in view of Perry (US Patent No. 6003529) and Deuser et al. (UK Patent Application Publication No. 2003840) and Hamilton (US Patent No. US3512539).

Lutolf teaches a dishwasher having a spray device including spray channel (3) and distributors, valves (80) (60), feeding the spray channel (3) which cooperate to *regulate* a quantity of rinsing liquid supplied to the spray channel (3) and a pressure of the rinsing liquid in parts of the spray channel. The spray channel has two open ends (each open end connects to the open valve) which rinsing liquid can be supplied in pressurized manner, see Figure. The pressure is variable -- by means of the valves (80) (60). The rinsing container (1) is trough-shaped. The valves have one opening (*inherent*) in which liquid can be supplied in a pressurized manner via an open end of the spray channel in a predetermined position of the distributor. The openings (see spray patterns) are necessarily configured over a predetermined arc segment. In the alternative, Lutolf does not teach that the check valves (60)(80) cooperate to *regulate* the flow of liquid to the spray channels; however, Van Dijck teaches a cleaning device in which a conduit (20) is supplied at each end by a distributor (valves 48 & 53), Fig. 1. Van Dijck teaches that "the degree of turbulence of the liquid may be increased by opening both valves 48 and 53, or they (either of them) may be rhythmatically opened and closed to provide surges of liquid" (Column 4, Lines 59-64). Further, Steen teaches feeding liquid under pressure, towards one

another, two columns of liquid which collide to create a lateral spray at the point of collision to create pulsating pressure actions of different phase (Lines 24-39).

The pulsing permits fine control of the angle of spread of the spray (Lines 45-50), see Fig. 2. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lutolf with the teachings of Van Dijck and Steen to create a washing machine in which there is fine control of the pulsing of the spray -- which is especially useful in a system with a stationary spray system -- to effectively wash the dishes and achieve the expected result. Lutolf as modified by Van Dijck as modified by Steen does not teach the to-and-fro movement of the distributor in alternating directions and the drive means ; however, Perry teaches a plate-type distributor (valve 40) which is movable related to the spray channel in a displacement movement in alternating directions, Fig. 2. Further, the valve is a variable valve and can control the flow rate to between *fully open, fully closed, or any flow rate there between* (Column 1, Lines 59-61). There is a drive means for driving the distributor in periodic movement. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lutolf as modified by Van Dijck as modified by Steen with Perry to create a dishwashing machine with an alternating spray pattern to achieve the expected result. Deuser et al. illustrates the pervasive use and motivation for alternating spray patterns – in particular for washing 3-D objects such as containers.

Lutolf as modified by Van Dijck as modified by Steen with Perry does not teach the distributor having a drive slot and driven by a rotary disk; cam arranged on the rotary disk and engaging the drive slot in the distributor; however, Hamilton teaches a drive means in which a shaft is reciprocated in to-and-fro movement by a drive slot (105) driven by a rotary disk (crank

wheel 99) and the cam (pin 101) is arranged on the rotary disk and engages the drive slot to cause movement, (Column 3, Lines 44-53), Fig. 1. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lutolf as modified by Van Dijk as modified by Steen with Perry with Hamilton to have a automated reciprocating distributor to create a fine spray pattern to achieve the expected result.

Claims 11-16 and 18-21 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Bolla (CH571852) in view of Steen (GB Patent Publication No. GB949954).

Bolla teaches a dishwasher having a spray device including parallel spray channels (10) and a distributor distributors feeding the spray channels (3) which *regulates* a quantity of rinsing liquid supplied to the spray channel (3) and a pressure of the rinsing liquid in parts of the spray channel. The spray channel has at least one open end. The pressure is variable -- by means of the distributor. The rinsing container is not taught as trough-shaped; however, it is widely known in the art to use such a container – see Lutolf (FR2285838) The distributor has one opening in which liquid can be supplied in a pressurized manner via an open end of the spray channel in a predetermined position of the distributor. The openings (see spray patterns) are necessarily configured over a predetermined arc segment. The distributor (8) is movable relative to a spray channel in a movement, Figs. 1-2. There is a drive means for driving the distributor in periodic movement.

Bolla does not teach that use of two distributors nor two open ends on the spray channels; however, Steen teaches feeding liquid under pressure, towards one another, two columns of liquid which collide to create a lateral spray at the point of collision to create pulsating pressure actions of different phase (Lines 24-39). The pulsing permits fine control of the angle of spread

of the spray (Lines 45-50), see Fig. 2, inserted into text, above. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bolla with the teachings of Steen, hence creating a dual-distributor system with two open ends on the spray channels to create a washing machine in which there is fine control of the pulsing of the spray -- which is especially useful in a system with a stationary spray system -- to effectively wash the dishes and achieve the expected result.

#### **(10) Response to Argument**

In regards to the rejection of claims 11, 14, 18-19, and 21 under 35 U.S.C. 103 (a) as being unpatentable over Lutolf (FR2285838), the Appellant argues that the references do not teach "a spray device including at least one spray channel for guiding a rinsing liquid and at least one distributor for regulating the supply of rinsing liquid to the at least one spray channel, the at least one spray channel having, on a side directed towards the interior of the rinsing container, openings for the passage therethrough of the rinsing liquid and having two open ends via which rinsing liquid can be supplied in a pressurized manner" which is a portion of the limitation of claim 11.

Specifically, Appellant argues that Lutolf does not teach the "at least one distributor for regulating the supply of rinsing liquid to the at least one spray channel". The Appellant supports this argument by stating that Lutolf fails to teach that the "pressure is variable by means of the check valves 60, 80" and that Lutolf teaches check valves which permit flow in only one direction; therefore, they do not regulate the supply rinsing liquid. The Appellant attempts to argue they that the check vales restrict "flow back" but not flow into the spray channel. The Appellant further argues that Lutolf can not vary the pressure of the rinsing liquid.

Examiner states that the claims do not require that the pressure is varied by the distributor and this argument is not commensurate in scope with the claims. The Appellant argues that Lutolf “does not teach at least one distributor for regulating the supply of rinsing liquid to the at least one spray channel. Appellant argues that the check valves 60, 80, of Lutolf fail to teach that the pressure is variable and that the check valves do not vary the pressure of the liquid. Examiner states that the claims do not require any such structure. For example, in claim 11, the only requirement is that there is a pipe with open ends which liquid “can be supplied in a pressurized manner”. This is both intended use and not a positive recitation due to the optional language used. To regulate the supply is different than regulating the pressure. Even if the valves are one-way valves they still regulate the supply to the spray channel because liquid is not permitted to flow backwards once it is inside the spray channel.

Next, the Appellant argues that Lutolf does not teach the spray channel having two open ends in which rinsing liquid can be supplied in a pressurized manner since Fig. 3 of Lutolf shows “a closed system of spray channels 3” and the ends of the spray channel are fixed to check valve. Examiner states, the Lutolf reference teaches ends in which liquid can be supplied – they are “open” and liquid can be supplied via either end. The applicant has failed to amend the original claims and the language of the claims is extremely broad.

In the alternative rejection of claims 11, 14, 18-19, and 21 under 35 U.S.C. 103 (a) as being unpatentable over Lutolf (FR2285838) in view of Van Dijk (US Patent No. 2654894) in view of Steen (GB Patent Publication No. GB949954), the Appellant again argues that Lutolf fails to teach the two “open ends” of the spray channel. The Appellant states that claims must be given the broadest reasonable interpretation in view of the specification; however, Examiner

states that limitations cannot be read into the claims from the specification. Appellant states that claim 11 requires "rinsing liquid can be supplied to the spray channels from both sides under different pressurization by a distributor"; however, Examiner finds no support in claim 11 for this statement. The Appellant's statement that the Lutolf teaching of "open ends" is inconsistent with the specification of the invention is moot since limitations cannot be read into the claims from the specification.

The Appellant's argument that the Office Action errs to consider the invention "as a whole" is not understood. Examiner states that the combination of the references teach the claimed invention. The Appellant also argues that one of ordinary skill would not have a reason to combine the references. The Appellant argues that the impracticality of manually opening and closing valves would discourage one from modifying with the Van Dijk reference. Examiner states that it would have been obvious and there would have been motivation to have fine control of the pulsing of the spray -- which is especially useful in a system with a stationary spray system -- to cost effectively wash the dishes to a high degree and achieve the expected result and this is a satisfactory rational to make the modification.

In regards to the rejection of claims 12-13 and 16 under 35 U.S.C. 103(a) as being unpatentable over Lutolf (FR2285838) in view of Van Dijk (US Patent No. 2654894) in view of Steen (GB Patent Publication No. GB949954) and further in view of Bolla (CH571852), the Appellant argues that the Office Action fails to articulate a reasonable basis for modifying Lutolf to arrive at the claimed invention of claim 12. Examiner states that no support is made for this assertion. The Appellants arguments with regards to claim 13 is a mere allegation of patentability. The Appellant argues that the Office Action failed to cite any support that Bolla

teaches a drive means for driving the distributor in a periodic movement. Examiner points to reference number (15) in Fig. 1 which can be seen to be a drive means. This is confirmed by the description of Fig. 1 on pg. 5, 2nd paragraph, of the Human translation.

In regards to the rejection of claims 12-13, 16, and 22 under 35 U.S.C. 103(a) as being unpatentable over Lutolf (FR2285838) in view of Van Dijk (US Patent No. 2654894) in view of Steen (GB Patent Publication No. GB949954) and further in view of Perry (US Patent No. 6003529) and Deuser et al. (UK Patent Application Publication No. 2003840), the Appellant argues that Perry does not teach that the drive means for periodic movement. Examiner states that a drive means is seen as (56)(64)(60) in Figs. 2-3. The Appellant's rebuttal that the slot (48) of the valve (40) clearly "does not reciprocate" is not persuasive. The distributor plate (valve 50) is movable relative to the spray channel -- see the arrows in Fig. 3. The Appellant's argument that only a portion of the valve is movable is misconstruing both the claimed invention and the teaching of Perry. The Appellant's arguments with regards to claims 17 and 23 are mere allegations of patentability.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Jason P Riggleman/

Examiner, Art Unit 1711



Art Unit: 1711

Conferees:

/Michael Barr/

Supervisory Patent Examiner, Art Unit 1711

/Michael Kornakov/

Supervisory Patent Examiner, Art Unit 1714